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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Tatsutoshi Kitajima

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ALEXANDRIA, VA 22314

EXAMINER

NGUYEN, LUONG TRUNG

ART UNIT

PAPER NUMBER

2622

NOTIFICATION DATE

DELIVERY MODE

08/11/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/796,022	Applicant(s) KITAJIMA, TATSUTOSHI	
	Examiner LUONG T. NGUYEN	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 July 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 12-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-10, 12 is/are allowed.
- 6) ☒ Claim(s) 13 is/are rejected.
- 7) ☒ Claim(s) 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. The allowable of claim 13 has withdrawn since the subject allowable of claim 13 read on Ejima (US 7,176,962). A new non-final office action sets forth below.

Claim Objections

2. Claims 1-10, 13-14 are objected to because of the following informalities:

Claim 1 (line 14), "to a time period" should be changed to --to a first time period--.

Claim 1 (line 14), "corresponding to time" should be changed to --corresponding to a second time--.

Claim 13 (line 14), "a second time period" should be changed to --a sharpness value corresponding to a second time period--.

Claims 2-10 are objected as being dependent from claim 1.

Claim 14 is objected as being dependent from claim 13.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ejima (US 7,176,962) in view of Levien (US 5,524,162).

Regarding claim 13, Ejima discloses a digital camera (digital camera 1, figures 1-3) having an image forming device configured to image a subject by a setup exposure condition and a digital image processing device configured to convert imaging data from the image forming device into a digital image, the digital camera comprising:

a set up device configured to set up a plurality of exposure conditions (capturing images 1, 2 at different shutter speeds (exposure conditions) at step S405, S409, figure 11, column 15, line 47 – column 16, line 45),

an imaging data obtaining device configured to obtain a plurality of imaging data imaged in accordance with the plurality of exposure conditions set by the setup device (capturing images 1, 2 at different shutter speeds (exposure conditions) at step S405, S409, figure 11, column 15, line 47 – column 16, line 45), and

a sharpness comparison device configured to compare sharpness based on the plurality of imaging data obtained by the imaging data obtaining device (compare the spatial frequency components, column 16, lines 20-33; column 22, lines 17 – 30), and a difference in sharpness corresponding to different exposure times (comparing the spatial frequency components of images obtained through different exposure times, column 16, lines 20-33; column 21, lines 59-65; column 22, lines 13-30);

wherein the sharpness comparison device compares a sharpness value corresponding to a first time period having a first exposure time with a second time period having the first

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exposure time, and if the sharpness value for the first time period having the first exposure time and the sharpness value for the second time period having the first exposure time is the same then it is determined that a blur has not occurred (correcting the spatial frequency component in image 2 to the level of the spatial frequency in image 1, it is becomes possible to create a blur-free image, column 11, lines 48-53; column 22, lines 17-30).

Ejima fails to specifically disclose a sharpness comparison device configured to determine whether a difference in sharpness of the plurality of imaging data indicates **one of** a shake of a digital camera, a movement of a subject, and absence of a blur based on the compared sharpness. However, Levien discloses that uneven sharpness (i.e., a difference in sharpness) can result from motion blur where a moving object has a difference in sharpness (column 1, lines 40-45), which corresponds to limitation “a movement of the subject based on the compared sharpness”). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device in Ejima by the teaching of Levien in order to provide a camera which has the capability of detecting motion of a subject based on a difference in sharpness.

Note that claim 1 uses limitation “**one of**” in the limitation “to determine whether a difference in sharpness corresponding to different exposure times of the plurality of imaging data indicates **one of** a shake of the digital camera, a movement of the subject, and absence of a blur based on the compared sharpness.” Therefore, the prior art can only read on **one of** the limitations “shake of the digital camera,” “movement of the subject,” and “absence of a blur.” In this case, the prior art reads on limitation “indicates a movement of the subject based on the compared sharpness.”

Allowable Subject Matter

5. Claims 1-10, 12 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 1, the prior art of the record fails to show or fairly suggest a digital camera, comprising:

wherein the sharpness comparison device compares a sharpness value corresponding to a time period having a first exposure time with a sharpness value corresponding to time period having a second exposure time, and if the sharpness value for the first exposure time is greater than or equal to the sharpness value for the second exposure time, then it is determined that a blur has not occurred, and if the sharpness value for the first exposure time is less than the sharpness value for the second exposure time, then it is determined that a blur has occurred.

Claims 2-10 are allowed as being dependent from claim 1.

6. Claim 14 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to LUONG T. NGUYEN whose telephone number is (571) 272-7315. The examiner can normally be reached on 7:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, DAVID L. OMETZ can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/LUONG T NGUYEN/
Examiner, Art Unit 2622
08/06/09